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JAMECO® ELECTRONICS

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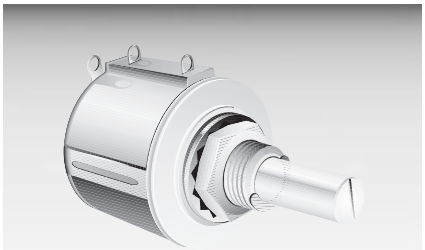
Jameco Part Number 183251



BOURNS®

3540/3541 - Precision Potentiometer

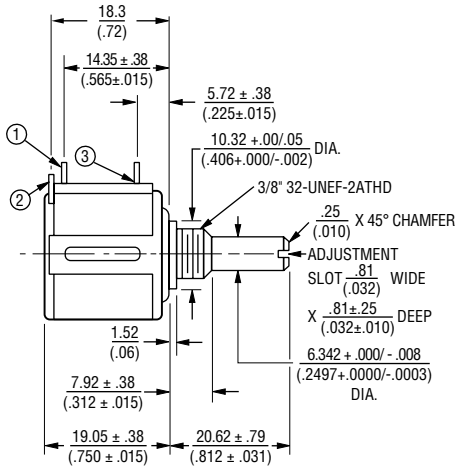
Features

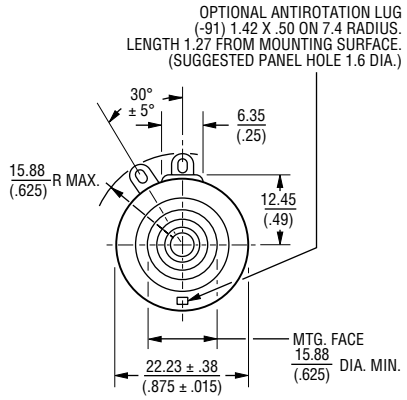
- Bushing mount
- Optional center tap and rear shaft extension
- Optional AR lug feature
- Gangable with common or concentric shafts
- High torque available
- Optional 0.1% linearity
- Non-standard features and specifications available

	3540 Wirewound Element	3541 Hybritron® Element
Electrical Characteristics[1]		
Standard Resistance Range	100 to 100K ohms	1K to 100K ohms
Resistance Tolerance	±5%	±10%
Independent Linearity	±0.25%	±0.25%
Resolution	See recommended part numbers	Essentially infinite
Effective Electrical Angle	3600° +10°, -0°	3600° +10°, -0°
Absolute Minimum Resistance/ Minimum Voltage	1 ohm or 0.1% maximum (whichever is greater)	Minimum voltage 0.2% maximum
Noise	100 ohms ENR maximum	Output smoothness 0.1% maximum
Power Rating (Voltage Limited By Power Dissipation or 447 VAC, Whichever Is Less)		
+70°C	2 watts	2 watts
+125°C	0 watt	0 watt
Dielectric Withstanding Voltage	MIL-STD-202, Method 301	MIL-STD-202, Method 301
Sea Level	1,000 VAC minimum	1,000 VAC minimum
Insulation Resistance (500 VDC)	1,000 megohms minimum	1,000 megohms minimum
Environmental Characteristics[1]		
Operating Temperature		
Static Operation Temp Range	-55°C to +125°C	-55°C to +125°C
Dynamic Temp Range	+1°C to +125°C	+1°C to +125°C
Temperature Coefficient[2]	±50ppm/°C maximum/unit	±100ppm/°C maximum/unit
Vibration	15G	15G
Wiper Bounce	0.1 millisecond maximum	0.1 millisecond maximum
Shock	50G	50G
Wiper Bounce	0.1 millisecond maximum	0.1 millisecond maximum
Load Life	1,000 hours, 2 watts	1,000 hours, 2 watts
Total Resistance Shift	±2%	±5%
Rotational Life (No Load)	1,000,000 shaft revolutions[2]	5,000,000 shaft revolutions[2]
Total Resistance Shift	±5% maximum	±5% maximum
Moisture Resistance	MIL-STD-202, Method 103, Condition B	MIL-STD-202, Method 103, Condition B
Total Resistance Shift	±2% maximum	±5% maximum
Mechanical Characteristics[1]		
Mechanical Angle	3600° +10°, -0°	3600° +10°, -2°
Shaft Runout	0.003 in. (0.08mm) T.I.R.	0.003 in. (0.08mm) T.I.R.
Lateral Runout	0.005 in. (0.13mm) T.I.R.	0.005 in. (0.13mm) T.I.R.
Pilot Diameter Runout	0.003 in. (0.08mm) T.I.R.	0.003 in. (0.08mm) T.I.R.
Shaft End Play	0.012 in. (0.30mm) T.I.R.	0.012 (0.30mm) T.I.R.
Shaft Radial Play	0.003 in. (0.08mm) T.I.R.	0.003 (0.08mm) T.I.R.
Stop Strength	75 oz-in. (53 Ncm) minimum	75 oz.-in. (53 Ncm) minimum
Torque (Starting & Running)	0.6 oz.-in. (0.35 Ncm) max.	0.6 oz.-in. (0.35 Ncm) max.
Backlash	1.0° maximum	1.0° maximum
Weight	Approximately 21G	Approximately 22.5G
Terminals	Gold-plated solder lugs	Gold-plated solder lugs
Ganging	2 cups maximum	2 cups maximum

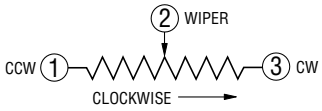
[1]At room ambient: +25°C nominal and 50% relative humidity nominal, except as noted.
[2]Consult manufacturer for complete specification details.

3540S-1/3541H-1




OPTIONAL ANTIROTATION LUG (-91) 1.42 X .50 ON 7.4 RADIUS. LENGTH 1.27 FROM MOUNTING SURFACE. (SUGGESTED PANEL HOLE 1.6 DIA.)
30° ± 5°
6.35 (.25)
15.88 (.625) R MAX.
12.45 (.49)
MTG. FACE
15.88 (.625) DIA. MIN.
22.23 ± .38 (.875 ± .015)

TOLERANCES: EXCEPT WHERE NOTED
DECIMALS: .XX ± .25 (.010), .XXX ± .13 (.005)
FRACTIONS: ±1/64
DIMENSIONS: MM (IN.)



Recommended Part Numbers

Part Number	Resistance	Resolution
3540S-1-201	200	.042
3540S-1-501	500	.031
3540S-1-102	1,000	.027
3540S-1-202	2,000	.021
3540S-1-502	5,000	.021
3540S-1-103	10,000	.019
3540S-1-203	2,000	.014

Part Number	Resistance	Resolution
3540S-1-103	10,000	.019
3540S-1-203	20,000	.014
3540S-1-503	50,000	.011
3540S-1-104	100,000	.008
3541H-1-102	1,000	.027
3541H-1-502	5,000	.021
3541H-1-103	10,000	.019

BOLD-FACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.

FOR OTHER OPTIONS CONSULT FACTORY.

Specifications are subject to change without notice.